Amendments to the Claims

Please amend the claims as follows:

1. (previously presented) A method of reducing the effects of myocardial ischemia in a patient subjected to an ischemic event, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the ischemic event, during the ischemic event, at commencement of a reperfusion, and during a reperfusion.

2. (canceled)

3. (previously presented) The method of Claim 1, wherein the single treatment consists essentially of continuously administering a dosage amount of about 50-5,000 U/kg erythropoietin to the patient for about 1-35 minutes.

4. (canceled)

5. (previously presented) The method of Claim 1, wherein the erythropoietin is administered about 1-20 minutes prior to the ischemic event in an amount effective to achieve a blood concentration of about 0.8-1.5 U/ml within the about 1-35 minutes following administration.

6. (previously presented) The method of Claim 1, wherein ~~t~~the erythropoietin is administered in an amount effective to increase the blood level of erythropoietin in the patient to at least about 100 times above a normal level.

7. (previously presented) The method of Claim 6, wherein the erythropoietin is administered in an amount effective to increase the blood level of erythropoietin in the patient to about 0.8-1.5 U/ml within the about 1-35 minutes following administration.

8. (original) The method of Claim 1, wherein the erythropoietin is administered parenterally by intravenous, intramuscular, or subcutaneous injection.

9. (original) The method of Claim 1, wherein the decrease in the myocardial ischemia is confirmed by at least one of a decrease in tissue necrosis, maintenance of an organ function, a decrease in cardiac enzyme leakage, a decrease in cardiac contractile protein leakage, maintenance of normal left and right cardiac ventricular cavity pressure, volume and flow, a decrease in cardiac arrhythmias, and a decrease in S-T segment elevation.

10. (original) The method of Claim 1, wherein the erythropoietin is administered at the commencement of reperfusion, during reperfusion, or both.

11. (previously presented) The method of Claim 1, wherein the erythropoietin is administered prior to or during the ischemic event, or both.

12. (original) The method of Claim 11, wherein the ischemic event is due to a disease state selected from the group consisting of a myocardial infarction, pulmonary infarction, stroke, and cerebral infarction.

13. (original) The method of Claim 11, wherein the ischemic event is due to a disease state selected from the group consisting of peripheral vascular occlusive disease, vascular occlusion, pre-natal or post-natal oxygen deprivation, trauma, chronic obstructive pulmonary disease, emphysema, adult respiratory distress syndrome, septic shock, sickle cell crisis, dysrhythmia, and nitrogen narcosis or neurological deficits caused by a heart-lung bypass procedure.

14. (original) The method of Claim 11, wherein the ischemic event comprises a surgical procedure.

15. (original) The method of Claim 14, wherein the surgical procedure comprises a heart surgery.

16. (original) The method of Claim 11, wherein the ischemic event comprises a heart attack.

17. (previously presented) The method of Claim 11, wherein the ischemic event comprises an organ transplant procedure, and the erythropoietin is administered to a donor organ at least about 15 minutes prior to commencement of the transplant procedure.

18. (previously presented) A method of treating the effects of myocardial ischemia in a patient in need thereof, comprising the step of: administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the ischemic event, during the ischemic event, at commencement of a reperfusion, and during a reperfusion, wherein a substantially immediate protective effect against myocardial ischemia occurs.

19-23. (canceled)

24. (previously presented) A method of substantially immediately reducing injury associated with myocardial ischemia and reperfusion in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to provide a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration of the formulation, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the

myocardial ischemia, during the myocardial ischemia, at commencement of the reperfusion, and during the reperfusion.

25. (previously presented) A method of preventing or reducing an ischemic injury associated with myocardial ischemia in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration and activate a protein kinase to prevent or reduce the ischemic injury, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the myocardial ischemia, during the myocardial ischemia, at commencement of a reperfusion, and during a reperfusion.

26. (previously presented) The method of Claim 25, wherein the erythropoietin is administered in an amount effective to provide a blood level of about 0.8-1.5 U/ml erythropoietin within the about 1-35 minutes following administration to the patient.

27. (previously presented) A method of preventing or reducing an ischemic injury associated with myocardial ischemia in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration and activate a potassium channel to prevent or reduce the ischemic injury, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the myocardial ischemia, during the myocardial ischemia, at commencement of a reperfusion, and during a reperfusion.

28. (previously presented) The method of Claim 27, wherein the erythropoietin is administered in an amount effective to provide a blood level of about 0.8-1.5 U/ml erythropoietin within the about 1-35 minutes following administration to the patient.

29. (previously presented) A method of providing substantially immediate cardioprotection in a patient in need thereof, comprising the step of:

administering a single treatment of an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes following administration, wherein substantially immediate cardioprotection occurs, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to a cardiac event, during the cardiac event, at commencement of a reperfusion, and during a reperfusion.

30. (canceled)

31. (previously presented) The method of Claim 30, wherein an amount of the erythropoietin is administered in an amount effective to provide a blood level of about 0.8-1.5 U/ml erythropoietin within the about 1-35 minutes following administration to the patient.

32-46. (canceled)

47. (previously presented) A method of reducing effects of myocardial ischemia in a patient in need thereof, comprising:

administering a single treatment to the patient of a unit dosage amount of erythropoietin in a pharmaceutically acceptable vehicle to achieve a blood concentration of about 0.5-10 U/ml and substantially immediately prevent or reduce effects of myocardial ischemia within about 1-35 minutes of said administration, the erythropoietin being administered at a time selected from the group consisting of about 1-35 minutes prior to the myocardial ischemia, during the myocardial ischemia, at commencement of a reperfusion, and during a reperfusion.

48. (new) A method of reducing effects of myocardial ischemia in a patient in need thereof, comprising:

administering erythropoietin to the patient to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes of said administration to prevent or reduce effects of myocardial ischemia.

49. (new) The method of Claim 48, wherein the erythropoietin is administered prior to a surgical procedure.

50. (new) The method of Claim 48, wherein the erythropoietin is administered prior to an angioplasty procedure.

51. (new) The method of Claim 48, wherein the erythropoietin is administered prior to a reperfusion, during the reperfusion, or both.

52. (new) The method of Claim 48, wherein the erythropoietin is administered during an ischemic event selected from the group consisting of a myocardial infarction, a pulmonary infarction, a stroke, and a cerebral infarction.

53. (new) A method of preventing or reducing injury associated with myocardial ischemia in a patient in need thereof, comprising the step of:

administering an effective amount of erythropoietin to the patient in a pharmaceutically acceptable formulation to achieve a blood concentration effective to activate a protein kinase, a potassium channel, or a combination thereof, to prevent or reduce the ischemic injury.

54. (new) A method of increasing resistance of a heart to injury from ischemia in a patient in need thereof, comprising:

administering erythropoietin to the patient to achieve a blood concentration of about 0.5-10 U/ml within about 1-35 minutes of said administration to reduce effects of ischemia on the heart of said patient.

55. (new) A method of reducing the effects of myocardial ischemia in an organ transplant recipient, comprising the step of:

exposing the organ to be transplanted to a pharmaceutically acceptable formulation comprising about 0.5-10 U/ml erythropoietin.

56. (new) The method of Claim 55, wherein the organ is infused with the formulation.

57. (new) The method of Claim 55, wherein the organ is exposed to the formulation for about 5-30 minutes prior to transplantation.

58. (new) The method of Claim 55, wherein the formulation comprises about 0.8-1.5 U/ml erythropoietin.